

<https://doi.org/10.61345/2734-8873.2024.3.2>

# PECULIARITIES OF APPOINTMENT AND CONDUCT OF FORENSIC CONSTRUCTION AND TECHNICAL EXAMINATIONS UNDER MARTIAL LAW

**Bidniak Hanna<sup>1</sup>**

**Annotation.** The article examines the peculiarities of appointment and conduct of forensic construction and technical examinations during martial law. Based on a thorough analysis of the current legislation, scientific opinions of scientists and forensic practice, the author analyses the current state of expert support in the field of construction and technical research and the impact of this legal regime. The article provides statistical data on the number of registered cases of violation of the laws and customs of war since the beginning of the full-scale invasion of Ukraine by the Russian Federation. The author highlights the problematic issues and reasons that impede the conduct of forensic examination, including the safety of specialists, restriction of free access directly to the crime scene or the absence of such an opportunity. The author focuses on compliance with the procedural requirements for obtaining documents and the procedure for providing materials for examination, and provides recommendations on their preparation. The author formulates a list of issues that are important for the investigation and need to be resolved by conducting a construction and technical expertise, including the cost of restoration work as a result of the destruction of the building, the amount of material damage caused by the destruction of the object, and the establishment of what damage occurred as a result of artillery shelling of the building, etc. Practical recommendations are given on how to draw up a resolution on conducting a forensic examination, as well as annexes to it. The issues of interaction with other services and involvement of specialists from other branches of forensic science are highlighted.

**Key words:** forensic examinations, construction and technical examinations, rocket attacks, military operations, cost of construction works, crimes, pre-trial investigation.

**Introduction.** The full-scale invasion of Ukraine by the Russian Federation has caused many adjustments in the work of not only law enforcement

---

<sup>1</sup> Head of Criminalistics and Premedical Training Department of Dnipro State University of Internal Affairs, Researcher at Dnipropetrovsk State Institute of Forensic Expertise of the Ministry of Justice, PhD in Law, Associate Professor. E-mail: [hanna.bidniak@dduvs.edu.ua](mailto:hanna.bidniak@dduvs.edu.ua). ORCID: 0000-0002-0515-9761.

officers, but also forensic experts. Artillery shelling, missile attacks, air raids – these are just a small part of the conditions in which forensic experts work on a daily basis. Sometimes, it is absolutely impossible to solve some offenses without an expert opinion. One of the main problems affecting the quality of pre-trial investigation and the success of the trial in criminal proceedings is the use of specialized knowledge, in particular, by engaging specialists and experts. The more complicated the mechanism of a criminal offense, the greater the need for specialized knowledge during the investigation, and the more significant their results are for the process of proof. However, it should be noted that the martial law creates a number of problems for forensic examination, including the safety of specialists, restrictions on free access directly to the crime scene or the absence of such an opportunity. Today, there is a tendency to overload expert institutions and individual specialists in this area, as well as to significantly increase the timeframe for conducting examinations.

**Analysis of scientific publications.** The conceptual foundations of the institute of specialised knowledge and the peculiarities of appointing and conducting forensic examinations in the course of criminal investigations have been the subject of scientific research: V. Goncharenko, N. Dondyk, H. Dondyk, V. Dyachuk, V. Konovalova, A. Kofanov, A. Ishchenko, N. Klymenko, V. Konovalova, M. Kostytskiy, Y. Korukhov, V. Lysychenko, V. Lukashevych, E.D. Lukianchikov, I.V. Pirog, E.A. Razumov, V.M. Revaki, M.V. Saltevsky, M.Y. Segai, E.B. Simakova-Yefremian, I.Y. Friedman, V.Y. Shepitko, M.G. Shcherbakovsky and others. In today's conditions, scientists are directing their scientific achievements towards the study of armed conflicts in the economic, social and legal contexts of our time [1], compensation mechanism for compensation for military damage to the environment [2], etc. Many scientific studies by foreign scholars focus on the importance of forensic construction knowledge for the investigation of budgetary offences. However, today there is a lack of updated knowledge that would reflect the current state and peculiarities of forensic construction expertise under martial law.

**The aim of the work.** Highlighting the peculiarities of appointing and conducting forensic construction and technical examinations during martial law.

**Review and discussion.** Of course, there are many classes, types, and subtypes of expertise relevant to pre-trial investigations. However, since the beginning of the war, the amount of destroyed or damaged property of citizens has significantly increased, resulting in a significant increase in the share of decisions to appoint forensic construction and technical examinations in the work of investigators, which rightly attracts the attention of scholars and practitioners. According to the statistics of the Dnipro Scientific Research Institute of Forensic Expertise, within the framework of investigations under Art. 438 of the Criminal Code of Ukraine "Violation of the Laws and Customs of War", 128 examinations were performed in December 2024 alone, during which experts assessed the value of damage caused to real estate owners

as a result of hostilities and determined the total amount of losses, which amounted to UAH 129,450,088.

Forensic construction and technical expertise is a procedural action that consists in conducting research and providing an expert opinion on issues to be proved in a particular case (civil, commercial, administrative) or in criminal proceedings. The objects of study of forensic construction and technical expertise are real estate, building materials, structures and relevant documentation. [3, p. 81]. In accordance with paragraph 5.1 of Section 2 of the Order of the Ministry of Justice of Ukraine No. 53/5 of 08.10.1998 "On Approval of the Instruction on the Appointment and Conduct of Forensic Examinations and Expert Studies and Scientific and Methodological Recommendations on the Preparation and Appointment of Forensic Examinations and Expert Studies", one of the main tasks of construction and technical expertise is to determine the cost of construction work related to the re-equipment, elimination of the consequences of flooding, fire, natural disaster, mechanical impact, etc [4].

It is the resolution of the issue of the cost of construction work related to the elimination of the consequences of certain destruction or damage to real estate that is particularly relevant in terms of conducting construction and technical expertise under martial law, since the vast majority of such examinations are currently caused by a criminal offense under Article 438 of the Criminal Code of Ukraine (Violation of the laws and customs of war) [5]. And although citizens whose real estate was damaged or destroyed as a result of shelling by the Russian Federation do not always file appropriate applications with law enforcement agencies for authorized persons to enter data into the Unified Register of Pre-trial Investigations, the number of officially recorded crimes should attract the attention of not only Ukrainians but also the whole world.

According to the official statistics from the website of the Office of the Prosecutor General of Ukraine, Article 438 of the Criminal Code of Ukraine (Violation of the Laws and Customs of War) is one of the most common criminal offenses against peace, human security and international law and order. Thus, the statistics show the following: in 2022, 60,387 cases of violation of the laws and customs of war were registered, in 2023 – 60,944 cases, and in the period from December 1 to August 31, 18,413 cases of this criminal offense were registered in the Unified Register of Pre-trial Investigations. Thus, the total number of cases of violation of the laws and customs of war since the beginning of the full-scale invasion of Ukraine by the Russian Federation until August 31, 2024 is 139,744 criminal offenses [6].

One of the greatest difficulties in conducting a forensic construction and technical examination in the above case is the lack of the possibility of conducting a direct examination of the real estate object by experts on site, as a result of which investigators usually request in their resolutions to conduct an examination based on the materials provided by them without providing the object for examination. Such an examination is possible, but its objectivity is questionable, as it is not uncommon for the applicant or the

victim to be unable to provide information such as the date of construction of the house, a description of specific damages, technical documentation regarding the land plot on which the house is located, and other important data. The absence of this information may negatively affect the course of the study, and as a result, the amount of damage to the house may be reproduced in a way that does not correspond to the actual amount.

According to the experts, the study of construction objects and relevant documentation is carried out using the following methods: visual, analytical and engineering and technical, with the use of appropriate equipment. One of the main methods of conducting a construction and technical examination is a visual inspection of the object of study. During the inspection, as a rule, non-destructive research methods are used, photographic recordings are made and the necessary measurements are taken. In cases where the object of study is a building or structure, for example, its roof, which cannot be photographed in full, unmanned aerial vehicles, such as quadcopters, are used. Today, as part of construction and technical research, they are used for visual inspection of the object of study. The quadcopter is used to take photos and videos that are necessary for the expert during the study. High-quality photographic recording of construction and technical expertise objects allows the initiators of the study to obtain a more detailed understanding of the objective factors that influenced the formation of a particular conclusion. Thanks to the quadcopter, it is possible to take horizontal and high-altitude photographs on the scale necessary for the examination, for example, to determine the actual size, structural features, and general view of the object of study [3, p. 81].

Also, even when the experts examine the object on the spot, certain features of the work regarding the experts are provided. The reason for the destruction of buildings is mainly the effect on them of the explosion of shells or rockets – this is related to the danger to the life and health of experts, due to the possibility of leaving ammunition that did not detonate at the scene of the event. Thus, on August 24, 2022, between 2 p.m. 50 min. and 3 p.m. 40 min. a rocket attack took place on the settlement of Chaplyne, Synelniky district, Dnipropetrovsk oblast, which resulted in the destruction of private houses with unexploded shells. Also, as a result of the impact of the 9M723 missile of the 9K720 “Iskander-M” operational-tactical missile complex at the “Chaplyne” railway station of the Synelnik district of the Dnipropetrovsk oblast, a second attack took place, which resulted in the deaths of people “[7].

In view of this, when carrying out such research at the facility itself, it is necessary to involve specialists in explosives, as well as to appoint investigators to commission judicial construction-technical and military expertise, as well as to appoint an explosive-technical expertise. For example, the above procedural actions were performed by employees of the State Bureau of Investigation during the investigation of a crime provided for in Part 1 of Article 438 of the Criminal Code of Ukraine, regarding the execution by a Russian serviceman of two shots with high-explosive fragmentation shells

from a 125 mm tank gun with direct fire at the building of the stationary building of the Municipal Non-Profit Enterprise “Trostyanets City Hospital” of the Trostyanets City Council, Sumy region [8].

When ordering a judicial construction and technical examination on the fact of an offense provided for in Article 438 of the Criminal Code of Ukraine, the following questions to the expert are of significant importance for the investigation:

- What is the cost of restoration work due to the destruction of a house, with a total area of 90.0 sq.m., built in 1962, at the address: \*address of the object?

- What is the amount of material damage caused to the house, with a total area of 90.0 sq.m., built in 1962, at the address: \*address of the object as a result of its destruction?

- What damage occurred as a result of artillery shelling of a building with a total area of 90.0 sq.m., built in 1962, at the address: \*address of the facility?

- Does the building damaged by shelling with a total area of 90.0 sq.m., built in 1962, at the address: \*address of the object, according to its architectural design (style), belong to the category of religious buildings: temples, church buildings?

An important aspect of the appointment of an expert examination by pre-trial investigation bodies is compliance with the procedural requirements for obtaining documents and the procedure for providing materials for the examination. The appointment of an expert examination is carried out by issuing a resolution by an investigator or prosecutor. As of today, the legislation of Ukraine does not have a single and clear form of a resolution on the appointment of a judicial construction and technical examination, and they may vary depending on the requirements of a specific expert institution and the region of its location. However, analyzing the purpose and specifics of conducting a judicial construction and technical examination on the fact of damage to property as a result of a violation of the laws and customs of war, as well as Part 2 of Article 244 of the Criminal Procedure Code of Ukraine (consideration by an investigating judge of a request for an expert examination), it becomes clear that the resolution must indicate:

- 1) the body of pre-trial investigation in which the relevant criminal proceedings are pending;

- 2) a brief summary of the circumstances of the criminal offense in connection with which the examination is being ordered;

- 3) legal qualification of the criminal offense with an indication of the article (part of the article) of the Law of Ukraine on Criminal Liability;

- 4) the expert that needs to be involved or the expert institution that needs to be entrusted with conducting the examination;

- 5) a list of questions that need to be asked to the expert [9].

The resolution is sent to the relevant expert institution, together with a covering letter, as well as annexes to the resolution, which may include: copy of the building's technical passport, copy of the victim's interrogation, photo table of building damage, land plot plan etc.

As is known, the choice of an expert institution is carried out taking into account the type of examination, objects of research and the nature of the issues to be resolved. In Ukraine, there is a system of forensic expert institutions in which forensic examinations are carried out. When conducting an examination outside an expert institution, the decision on the appointment of the examination indicates a specific specialist who is entrusted with conducting the examination [10].

In the event that the prosecutor makes a decision to change the jurisdiction in accordance with Part 2 of Article 218 of the Code of Criminal Procedure of Ukraine (Place of pre-trial investigation), a notification is also sent to the expert institution conducting the expert study, together with the resolution on the appointment of the examination, in which the investigator or prosecutor requests to send the expert's conclusions to the legal address of the pre-trial investigation body, which is assigned jurisdiction over the criminal offense [9].

**Conclusions.** Therefore, conducting forensic examinations under the legal regime of martial law has a number of features, primarily related to ensuring the personal safety of forensic experts during the examination of objects at the place of their original location. The investigator should carefully approach the number of assigned examinations and clearly formulate questions for the expert, taking into account the available objects of research and the tasks of the investigation. An important aspect is also the comprehensive approach of experts to the study of the object and their interaction with law enforcement officers in order to achieve completeness and reliability of factual data in their conclusions.

### References:

1. Kirin, R., Hryshchak, S., Petliuk, Yu. (2024). Aktualni problemy kompensatsiinoho mekhanizmu vidshkoduvannia militarynykh zbytkiv dovkilliu. [Actual problems of the compensatory mechanism for indemnification of military damage to the environment.]. *Law. State. Technology*, 1, 8–19. 2024, DOI: <https://doi.org/10.32782/LST/2024-1-2>.
2. Pyrih Ihor, Bidniak Hanna, Pletenets Viktor (2019). Armed conflicts in the economic, social and legal context of the present: causes, regularities and contradictions. *Economic Annals-XXI: Volume 175, Issue 1-2, Pages: 4-9, May 28*, DOI: <https://doi.org/10.21003/ea.V175-01>.
3. Kachan D.V. (2020). Osoblyvosti provedennia budivelno-tekhnichnoi ekspertyzy. [Features of construction and technical expertise]. *Dyskusiini pytannia z teorii ta praktyky suchasnoi ekspertyzy: materialy kruhloho stolu. Zaporizkyi natsionalnyi universytet. Zaporizhzhia: ZNU*, URL: <https://dspace.znu.edu.ua/jspui/bitstream/12345/5206/1/0046949.pdf#page=82>.
4. Pro zatverdzhennia Instruktsii pro pryznachennia ta provedennia sudovykh ekspertyz ta ekspertnykh doslidzhen ta Naukovo-

- metodychnykh rekomendatsii z pytan pidhotovky ta pryznachennia sudovykh ekspertyz ta ekspertnykh doslidzhen: Nakaz Ministerstva Yustytzii Ukrainy № 53/5 vid 08.10.1998. URL: <https://zakon.rada.gov.ua/laws/show/z0705-98#Text>.
5. Kryminalnyi kodeks Ukrainy: Zakon Ukrainy vid 07.09.2024 p. № 2341-III URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text>.
  6. Ofis Heneralnoho prokurora Ukrainy: ofitsiinyi veb-sait. URL: <https://www.gp.gov.ua>.
  7. Korotaiev V.M., Kirin R.S., Chaplynskyi K.O., Reviakina T.O., Ovcharov O.O., Bidniak H.S. (2024). Identyfikatsiia raket ta reaktivnoi zbroi rosiiskoi federatsii: navch. posib. 2-e vyd., dop. i pererob. [Identification of missiles and rocket weapons of the Russian Federation]. Dnipro: Dnipropetrovskyi, derzhavnyi universytet vnutrishnikh sprav, Dnipropetrovskyi NDEKts MVS, 424 p.
  8. Vyroky Trostianetskoho raionnoho sudu Sumskoi oblasti vid 14.02.2024 u spravi № 588/1363/23. URL: <https://reyestr.court.gov.ua/Review/116968500>.
  9. Kryminalnyi protsesualnyi kodeks Ukrainy: Zakon Ukrainy vid 07.09.2024 p. 4651-VI. URL: <https://zakon.rada.gov.ua/laws/show/4651-17#Text>.
  10. Pyrih I.V., Bidniak H.S. (2019). Vykorystannia spetsialnykh znan na dosudovomu rozsliduvanni: navch. posibnyk. [Use of specialised knowledge in pre-trial investigations]. Dnipro: Dniprop. derzh. un-t vnutr. sprav, 140 p.